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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/995,803

11/29/2001

Kazuhiro Murakami

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02/04/2003

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EXAMINER

MAYO III, WILLIAM H

ART UNIT

PAPER NUMBER

2831

DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,803

Applicant(s)

MURAKAMI ET AL.

Examiner

William H. Mayo III

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in present Application No. 09/995,803, filed on November 29, 2001.

Claim Objections

2. Claim 8 is objected to because of the following informalities: The term "calmed" appears in line 2, which is misspelled. The applicant should replace the term with – claimed--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 5 recites the limitation "the electrical cables" in line 2, 4, and 5, which is confusing and renders the claim indefinite. It is unclear whether the applicant is referring to the previous mentioned "electrical cable" or introducing new electrical cables. If the applicant is referring to the previous mentioned term, then he/she should

recite the term with consistency. If the applicant is referring to new cables, then he/she should make the term more distinguishable.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 3-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Takuya et al (JP Pat Num 05-121139, herein referred to as Takuya). Takuya discloses a cable enrolling conductive thin film (Figs 15-22) that is ultrasonic welded to another conductor (abstract). Specifically, with respect to claim 1, Takuya discloses a conductive thin film (210, Fig 16) having a conductor layer (211), a first insulating layer (212) laminated on a front face of the conductor layer (211), and a second insulating layer (214) laminated on a rear face of the conductor layer (211), and an electrical cable (E) having an electrically conductive wire (E1) and an insulating sheath (denoted as C) covering the core wire (E1), wherein the conductor layer (211) of the conductive thin film (210) and the core wire (E1) of the electrical cable (E) are welded to each other (Page 8 of translation pages, paragraph 31). With respect to claim 3, Takuya discloses that the sheath (C) of the electrical cable (E) has a round section (Fig 16). With respect to claim 4, Takuya discloses that the conductive thin film (210) is capable of enrolling the electrical cable (E) to electrically shield the electrical cable (E). With respect to claim 5,

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Takuya discloses that the sheet (210) may comprise a plurality of electrical cables (E, to connect to each conductive layers 211) may be disposed parallel on the conductive thin films (211), wherein the conductive thin film (210) is capable of enrolling the electrical cable (E) to electrically shield the electrical cable (E). With respect to claim 6, Takuya discloses that the bonded conductive thin film (10) and the electrical cable (E) are utilized in car wiring or electrical machinery, thereby inherently being grounded (Page 11, under Technical Field). With respect to claim 7, Takuya discloses a method of producing a conductive thin sheet (10, Fig 15) comprising the steps of laying the electrical cable (E) on first insulation layer (12), and welding the electrical cable (E) on the first insulation layer (12) by ultrasonic welding so that the conductor layer (11) of the conductive thin film is connected to the core wire (E1) of the electrical cable (E, Page 8 of translation pages, paragraph 33).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takuya et al (JP Pat Num 05-121139) in view of Kato et al (Pat Num 5,584,122, herein referred to as Kato). Takuya discloses a cable enrolling conductive thin film (Figs 15-22) that is ultrasonic welded to another conductor (abstract) as disclosed above with reference to claim 1. Specifically, with respect to claim 2, Takuya discloses that the conductive thin film (210) has a first and second insulating layer (212 & 214) and an electrical cable (E) having a sheath (C). With respect to claim 8, Takuya discloses a method of producing a conductive thin sheet (10, Fig 15) comprising the steps of laying the electrical cable (E) on first insulation layer (12), and welding the electrical cable (E) on the first insulation layer (12), by ultrasonic welding so that the conductor layer (11) of the conductive thin film is connected to the core wire (E1) of the electrical cable (E, Page 8 of translation pages, paragraph 33). With respect to claim 10, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), a horn tip (P) is opposed to the electrical cable (E) and the anvil (A) is opposed to the second insulating layer (14). With respect to claim 11, Takuya discloses a method wherein during the step of ultrasonic welding (Fig 17), the horn tip (P1) and the anvil tip (A1) are moved to come close to each other (Page 8, paragraph 33). With respect to claim 12, Takuya discloses a method wherein during the step of ultrasonic welding (Fig

17), a horn tip (P) contacts the sheath (C) of the electrical cable (E) and the anvil (A) contacts the second insulating layer (14) of the sheet (10).

However, Takuya doesn't necessarily disclose the first and second insulating layers being welded to the sheath of the electrical cable (claim 2), nor the method producing the cable wherein the first and second insulating layers being welded to the sheath of the electrical cable (claim 8).

Kato teaches connection method (Figs 17-19) for connecting covered wires to another member by ultrasonic welding, wherein sufficient insulation is kept for the connection portion thereby simplifying the connection work and improving the mechanical strength of the connection portion (Col 3, lines 55-62). Specifically, with respect to claims 2 & 8, Kato teaches a conductive thin film (75, Fig 17) having a conductor layer (1), and an insulating layer (73) laminated on a front face of the conductor layer (1) and the rear face of the conductor layer (1), and an electrical cable (W1) having an electrically conductive wire (1') and an insulating sheath (3) covering the core wire (1'), wherein the conductor layer (1) of the conductive thin film (75) and the core wire (1') of the electrical cable (W1) are ultrasonic welded to each other, wherein the insulating layer (73) of the thin film (75) is welded to the sheath (3) of the electrical cable (W1, Col 21, lines 35-66).

With respect to claims 2 & 8, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the connection portion of Takuya to comprise the insulating layers being welded to the sheath of the electrical cable as taught by Kato because Kato teaches that such a configuration

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provides a connection structure that simplifies the connection work and improves the mechanical strength of the connection portion (Col 3, lines 55-62).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Maegawa (Pat Num 6,376,773), Suzuki et al (Pat Num 5,642,852), Nakamura et al (Pat Num 6,023,022), Tanaka et al (Pat Num 6,247,977), Weinmann et al (Pat Num 4,249,304), Schauer (Pat Num 4,707,914), all of which disclose flat cables being ultrasonic welded to round cables, Takada et al (JP Pat Num 7-263050), Shinchu (Pat Num 5,869,784), Ide et al (Pat Num 5,922,993, 5,925,202, 5,959,252, 5,929,384, 6,072,123, 6,327,777), Ide (Pat Num 6,046,407, 6,201,188, 6,087,589, 6,381,840), Kato et al (Pat Num 6,004,170), Shinchu et al (Pat Num 6,313,407), and Tanikawa et al (Pat Num 6,291,771, 6,226,865), all of which disclose the ultrasonic welding of cables.

Communication

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to be "WHM III", written in a cursive, stylized manner.

WHM III
January 25, 2003